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SOURCE Doklady Akademii Nauk SSSR (Novaya Seriya), 1948 - 1952.

PARTICIPATION OF A. N. TIKHONOV
IN SOVIET ANTENNA AND WAVE-GUIDE RESEARCH

/Comment; Summary: The following list contains titles of articles published in the Soviet journal Doklady Akademii Nauk SSSR from 1948 to 1952. These articles, submitted by four academicians to the Academy of Sciences USSR, are devoted to research on the general subject of antennas and wave guides; most of them give credit lines to A. N. Tikhonov, geophysicist and mathematician, and Corresponding Member, Academy of Sciences USSR. It is to be noted that Tikhonov's own published works, as [] give no indication that Tikhonov has been participating in research in the field of radiophysics.

Listed in Group I (Items 1-13) are articles by physicist R. G. Mirimanov of the Institute of Automatics and Telemechanics, Department of Technical Sciences, Academy of Sciences USSR. Items 1-10 each give a credit line to Tikhonov. In Item 3, it is stated that the work was done at Tikhonov's suggestion, and in most of the earlier articles Tikhonov is thanked for giving suggestions as to the future direction of the research. Items 1 and 4-10 each give another credit line to academician B. A. Vvedenskiy, who is known for his work in radiophysics.

In Group II are listed an article by B. L. Rozhdestvenskiy (Item 14) and one by Rozhdestvenskiy and D. N. Chetayev, mathematician (Item 15). In both items, Tikhonov is given credit line, and in Item 14 he is referred to as "directing this work." (CIA/CD 1, "Soviet Men of Science,") does not list a B. L. Rozhdestvenskiy. It does list a Lieutenant Colonel Rozhdestvenskiy (fnu) connected with guided missiles and rockets. It should be noted that Rozhdestvenskiy is a fairly common family name in the Soviet Union.)

Group III lists three articles (Items 16-18) by A. G. Sveshnikov [] All three give a credit line to Tikhonov, and Item 17 refers to him as "directing this work." Item 16 also contains a credit line to physicist A. A. Samarskiy of Moscow State University, whose wave-guide research dates back at least as far as 1947.

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Author	Title	Affiliation	Date of Submission to Editor	Periodical
GROUP I				
Submitted by B. A. Vvedenskiy				
1. Mirimanov, R. G.	Solution of the Problems of Diffraction of a Plane Electromagnetic Wave from a Paraboloid of Revolution of Infinite Dimensions by Means of Laguerre's Function	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	17 Feb 48	DAN, Vol LX, No 2, p 203, 1948
2. Mirimanov, R. G.	Solution of the Problem of Diffraction of Spherical Electromagnetic Waves from a Paraboloid of Revolution of Infinite Dimensions	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	17 Feb 48	DAN, Vol LX, No 3, p 357, 1948
Submitted by V. A. Pok				
3. Mirimanov, R. G.	Diffraction of Spherical Electromagnetic Waves Around a Circular Disk	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	9 Jun 48	DAN, Vol LXI, No 4, p 617, 1948
Submitted by B. A. Vvedenskiy				
4. Mirimanov, R. G.	A New Method for Solving Problems of the Reflection of Electromagnetic Waves from Thin Nonenclosed Surfaces of Finite Curvature	Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR	28 Mar 49	DAN, Vol LXVI, No 4, p 641, 1949

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| 5. Mirimanov, R. G. | Diffraction of a Spherical
Electromagnetic Wave from a
Thin Spherical Segment | Institute of
Automatics
and Tele-
Mechanics,
Academy of
Sciences USSR | 2 Apr 49 | DAN, Vol LXVII, No 1,
P 65, 1949 | 10
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| 6. Mirimanov, R. G. | Diffraction of a Spherical
Electromagnetic Wave from a
Paraboloid of Revolution of
Finite Dimensions with the
Exciting Field of the Dipole
Located along the Axis of
Symmetry of the Paraboloid | Institute of
Automatics
and Tele-
Mechanics,
Academy of
Sciences USSR | 28 May 49 | DAN, Vol LXVII, No 5,
P 835, 1949 | 10
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| 7. Mirimanov, R. G. | Diffraction of a Spherical
Electromagnetic Wave from a
Paraboloid of Revolution of
Finite Dimensions When the
Exciting Field of the Dipole
is Perpendicular to the Axis
of Symmetry of the Paraboloid | Institute of
Automatics
and Tele-
Mechanics,
Academy of
Sciences USSR | 28 May 49 | DAN, Vol LXVII, No 6,
P 1021, 1949 | 10
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| 8. Mirimanov, R. G. | The Solution of One General
Problem in Applied Electro-
dynamics | Institute of
Automatics
and Tele-
Mechanics,
Academy of
Sciences USSR | 14 Feb 50 | DAN, Vol LXXI, No 5,
P 879, 1950 | |
| 9. Mirimanov, R. G. | Radiation Resistance of a
Dipole Placed in the Center
of a Thin Spherical Shell | Institute of
Automatics
and Tele-
Mechanics,
Academy of
Sciences USSR | 14 Feb 50 | DAN, Vol LXXI, No 6,
P 1061, 1950 | |

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|-----|------------------|---|--|-----------|------------------------------------|
| 10. | Mirimanov, R. G. | Diffraction of Spherical Electromagnetic Waves from a Thin Conical Surface of Finite Dimensions | Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR | 26 May 50 | DAN, Vol LXXIII, No 4, p 693, 1950 |
| 11. | Mirimanov, R. G. | Complex Radiation Resistance of an Antenna System When It Is in Electrodynamic Interaction with any Other Antenna System | | 26 May 50 | DAN, Vol LXXIII No 6, p 1177, 1950 |
| 12. | Mirimanov, R. G. | Radiation Resistance of a Dipole Close to a Highly Conductive Ellipsoid of Revolution | Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR | 30 Jun 51 | DAN, Vol LXXX, No 2, p 189, 1951 |
| 13. | Mirimanov, R. G. | One Method for Determining the Electromagnetic Field Inside a Closed Spherical Shell, Part of Which has a Different Dielectric Strength | Institute of Automatics and Tele-Mechanics, Academy of Sciences USSR | 30 Jun 51 | DAN, Vol LXXX, No 3, p 361, 1951 |

Submitted by B. A. Vvedenskiy

GROUP II

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|-----|---|---|--|-----------|------------------------------------|
| 14. | Rozhdestvenskiy, B. L. | Waves in a Plane Horn | | 5 Jan 51 | DAN, Vol LXXVII, No 2, p 221, 1951 |
| 15. | Rozhdestvenskiy, B. L., Chetayer, D. N. | Problem of the Elimination of Reflections in Wave Guides with Changing Cross Sections | | 11 May 51 | DAN, Vol LXXIX, No 3, p 427, 1951 |

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GROUP III

Submitted by I. G. Petrovskiy

16. Sveshnikov, A. G. Principles of Radiation

9 May 50

DAN, Vol LXXIII, No 5,
p 917, 1950

17. Sveshnikov, A. G. Principle of Maximum
Absorption for a Wave
Guide

25 Jun 51

DAN, Vol LXXX, No 3,
p 345, 1951

Submitted by S. L. Sobolev

18. Sveshnikov, A. G. Principle of Limiting
Absorption for a Meta-
harmonic Equation

9 Jul 46

DAN, Vol LXXXVI, No 2,
p 231, 1952

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